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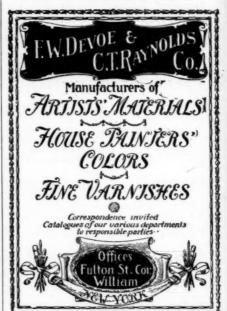
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A Weekly Journal of Education.

Vol. XLVII.

For the Week Ending July 22

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No. 4

The business department of THE JOURNAL is on page 91.

All letters relating to contributions should be addressed plainly, "Editors of SCHOOL JOURNAL." All letters about subscriptions should be addressed to E. L. Kellogg & Co. Do not put editorial and business items on the same sheet.



Albany lately a very good paper on pedagogy was read by Principal Keyser, of Middleburg academy. It was remarked by a hearer that the academies might well have begun earlier to consider this subject. It required

men of the largest minds fifty years ago to see that the business of teaching was founded on principles. One who reads the history of education in New York state will find that there were some men like Bishop Alonzo Potter who felt that the teaching of the far away school in the country, or of the neglected children in the large city, demanded trained powers. But how few these were! Ex-Governor Foote, of Vermont, tells us the practice was, when a candidate proved very poorly prepared, to remark, "Well, she will do for a small school somewhere." But that all for large and small schools must have a ground work in pedagogy, is a modern idea.

The new plan of teaching the deaf and dumb is to teach them to talk and to read by the lips. Then they go to any school, and it is wonderful how they enter on the work of life, not at all disadvantageously. If they go to a high school they mix with other pupils, study Latin and French, and take an excellent standing. The ability they acquire in lip reading is simply wonderful; they only need to see the person speaking to know what he says.

In schools for the deaf and dumb it has been found of the highest service to teach sloyd, sewing, and gymnastics. There the educative value of these things seems more apparent. Typesetting has been found a favorite occupation; it appears that it is the talking of the types that is so attractive. Altogether the outlook for the deaf and dumb is much brighter that it once was.

THE SCHOOL JOURNAL appears fifty times a year. The next issue will be on Aug. 12. We say a brief Good-by to our readers with this number, in order that editors and printers may indulge in that annual treat, their summer vacation. We hope to greet all of our old friends on our return and help them get ready for the opening of school.

"In general terms, the commission of the Inquisition was, to extirpate religious dissent by terrorism, and surround heresy with the most horrible associations. Between 1481 and 1808 it had punished three hundred and forty thousand persons, and of these nearly thirty-two thousand had been burnt."

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Expanses of eternity, shall throb;
And should one note, which thou, by greater care,
More zealous labors, or by added skill,
Might now attune in harmony, be found
At last in dissonance with virtue, truth,
Or mental symmetry, in Heaven's sight,
Methinks a fearful guilt will on thee rest.
Thou hast to do with God's most noble work!
The image fair and likeness of himself!
Immortal mind."

On Questioning.

By an Ex-Superintendent.

Many a teacher, who wants to do good teaching, fails because he questions without rousing any thought or effort in the pupil. In a school lately visited, a class in arithmetic was questioned on the division of a mixed number by a mixed number, somewhat as follows: "Well, James, you have finished, have you?" "Yes, sir." "What do you get?" "Four and a half." "You reduced the 6 2-3 to an improper fraction, did you?" "Yes, sir." "Then you, etc." Most of the questions proposed could be answered by "Yes, sir."

I was curious to know if this was not a habit that had

I was curious to know if this was not a habit that had grown on this teacher; he had evidently taught a dozen

years.

The history class came up; they had been studying American history, about the time of Arnold's treason. "Arnold was in command at West Point, was he?" "Yes, sir." "And he had been in communication with Sir Henry Clinton." "Yes, sir." And so on. Evidently the habit was firmly fastened. This teacher was a conscientious, painstaking man; he studied his lessons with infinite care; he was the one depended on at a gathering of teachers if any point was to be elucidated. I am not certain but that I was told he had injured his health by over-study.

In a certain school where there were seven teachers employed I noticed one was called, "What do you Understand." I found this was a nickname applied to him because he used the phrase so much in his classes. I visited his class-room; he read a definition of a participle and then said, "What do you understand by that, Mary?" A definition of an adjunct sentence was read by a pupil—"What do you understand by that?" followed. It is well worth saying to every teacher, if you get into the habit of saying, "What do you understand by——?" determine to give it up; while it may be useful at times, the probability is that it is employed aimlessly.

And here the great fault of the questioner is revealed—he is aimless. Such a man should visit a law court and notice the care with which the trained lawyer asks questions. To question aright is difficult. It is one of the nice points. But the teacher too often begins to question without seeing the point himself. Time is an important element; let not the pupil's time be wasted while the teacher meanders all around the subject before

the class; let the teacher aim straight at the bull's eye.
I visited a school where there was an alert class gazing eagerly into the eyes of the teacher. I sat quickly

down so as not to interrupt. The teacher said, "The boys are daring me to ask them questions" and went on. A boy was told to stand, and the rest pitched upon him—the subject was percentage. First, one asked five questions; then another asked five, and so on.

When this boy was beaten, another rose eager to be tried. The questions came short, sharp, and quick; and he went down, but rose again, for the teacher interposed, "That's a good answer," and stood it through. I noted that he felt like one who had run a race.

The recitation time is almost holy time; then the pupil and teacher are face to face; then is the time the teacher can do his pupils good if he is going to do it at all. The pupil should feel there is to be an encounter of wits; he should (in a right sense) dread what is coming—dread it as the boy with the bat dreads the coming of the swift base-ball, but determines to summon up his energies and meet it. He should feel there is to be something to be said and done of a worthy character, of a stimulating character, of an exhilarating character.

In one school there was a Scotch teacher, who had nearly fifty pupils; this man was not a model teacher, but he might have been if he had left off his everlasting smoking and some other things. As a questioner, as one who could pry into the pupil's possessions, who could discover weak points, who could uncover irrational conclusions, he had no superior—his recitation period used to resemble the hunting of a rat that had escaped. Teacher and class would start off after some truth (generally the grand scrimmage would occur in grammar) and soon they would all be on the run. "It's an adverb, you say; will you stick to that now? What is an adverb? And how many classes? And which do you make this? Time, eh? Oh, boys, he says this is a time adverb. You won't give up on that? What would you say if Jenny should tell you it was an adjective?" All this in an excited way that wrought the class up to the highest pitch. And when the fight was over and some pupil would say, "Mr. Mc—, which is it an adverb or an adjective?" he would reply, "I must be a poor teacher if my pupils cannot tell turnips from pumpkins," and this was all the answer they would get.

How can one become a good questioner? for a good questioner and a good teacher are almost synonymous. It is not accomplished by waiting until the class comes before the teacher. Does any one suppose a good lawyer waits until the case is called to put his questions? He has formed them all in his mind, or the important ones, before the trial. So it must be with the teacher. Joseph Payne used to say before the College of Preceptors (London), "Write out the questions you will ask your pupils and look at them." It is the true prescription.

The teacher will find, if he watches himself, that he is at this time probably in a rut; his pupils know just what questions he will ask them; they have discerned and read him. Let him determine to surprise them.

"How often do our most intimate friends fail to perceive the real motives of our every-day actions; how frequently they misinterpret our intentions. If this be the case in what is passing before our eyes, may we not be satisfied that it is impossible to comprehend justly the doings of persons who lived many years ago, and whom we have never seen? We still deal with the same questions about which the old Greeks disputed. What is God? What is the soul? What is the world? How is it governed? Have we any standard or criterion of truth?"

"It was in India that men first recognized the fact that force is indestructible and eternal. This implies ideas more or less distinct of that which we now term its correlation and conservation."

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By FRANCIS W. PARKER.

Within twenty years, the attention of intelligent American teachers has been called to the history of education in the Old World and also to the lives of the great reformers. The names of Comenius, Ratich, Sturm, Basedow, Rousseau, Pestalozzi, Pere Girard. Jacotot, and Frœbel, are fast becoming well known to all teachers worthy of the name. Their lives, principles, and methods, are studied and sometimes applied.

This study is extremely beneficial to educators, and it should be at all times encouraged. We cannot know too much of the history of education and of our spiritual We cannot know too much of the rich inancestors. heritance that has come down to us. By and by, it will come to us that the history of the common school system of America, the outgrowth of all the past and the climax of all school organizations, is the most profitable study of educational history, interpreted and understood in the light of all past educational records. derful history cannot be studied economically at present, for the good reason that it has not yet been written. There is a great deal of material for such a history, but no man has yet arrived to tell the magnificent story of the birth and growth of that mode of education which is one day to dominate all others, if society continues to govern itself.

The reason why we have nothing like an adequate history of the schools of America is not far to seek. We are now living that history; we are a part of it. The school system of America is very young, and many prominent educators still live who were in the storm and stress of its birth and in its first stages of growth. A genuine history would seem like adverse criticisms upon some very honest and earnest teachers who have done effective work in their time, but who have not, or do not, recognize the infinite possibilities of human growth.

There have been schools of education without a name which have dominated, to a great extent, the educational thought of the country; one of these schools of education may be called the Boston school, of seventy-five years ago. This Boston school, its doctrines and methods, is to-day felt all over the United States, from Maine to California. The Boston school has made itself notorious by its strong opposition to the study of all principles and methods, especially those enunciated by America's greatest educator, Horace Mann. Its attitude of opposition to progress made the Boston school and gave it a dominating influence all over America.

There may be young teachers of to-day who fancy, from the respect and love which is bestowed upon the name of Horace Mann, that his reforms were met with general approbation, and that he was received by the educators of the country into full fellowship. Nothing can be farther from the truth. A true life of Horace Mann would reveal immense obstacles which lay in his path, consisting of a bitter, unrelenting opposition on the part of the majority of influential teachers of the The wonderful story of heroism has never yet been told, and, as I have already indicated, it has not been told because it would be a revelation to the Boston school, of school keeping, of men who are now living,-living men who have unconsciously become adherents of the theories presented by the thirty one masters Most of the arguments who opposed Horace Mann. used in that most instructive discussion have been used ever since; they fall so naturally from the mouth of an adherent of the old Boston school that novices often fancy that they are original.

The life of Horace Mann was the life of Galileo, and every other reformer, repeated. The men who bitterly and almost fiercely opposed him were excellent men, men chosen from the best teachers of New England to be the masters of the Boston schools. They poured out a flood of rhetoric and eloquence against the "fads" of a man who dared to propose an improvement in the education of children. As I have already said, their logic has been complimented ever since by constant use

on the part of every opponent of educational progress. Every item of improvement that Horace Mann proposed is now recognized as entirely orthodox, by good educators worthy of the name, but notwithstanding this, no historian has ever yet dared to write a faithful bio-

graphy of this noble hero

It must not be supposed for a moment that Horace Mann was alone in the great war for educational reform. There were strong men who preceded him, and strong men and women who followed him, in his work. History of the reforms in the methods of teaching reading, if adequately written, would be of exceeding interest to the teachers of this country. Horace Mann proposed to abolish teaching the alphabet as an initial step in This was the brunt of the battle so learning to read. far as methods are concerned in Boston. The Boston masters succeeded, after a long struggle, in putting off the reform in teaching the first steps of reading for half a century. I know of only one superintendent in the country to-day who is a strong advocate of the alpha-bet method. Twenty-five years ago, 99-100 of all the children in New England,—I think this is a fair estimate, —learned to read by the alphabet method. In 1869, approximately, Leigh's phonetic method was introduced into Boston, which was the first determined step in the improvement of methods in teaching reading. The profitable lesson to all teachers, and indeed to all who are interested in the education of children, is that it takes a very long time to introduce a simple, natural, common-sense principle into the schools. It is not my purpose here to discuss principles, for they are too we'll known; but to bring to the minds, how very much it costs to help our little ones to something better.

The story of Webb and the word method is well known. The work of Webb was of inestimable value to the schools. He did not enunciate a full doctrine or method of teaching reading, but he presented very strongly a

device which is in itself natural and right.

Another teacher and one to whom, in my opinion, this country owes more than to any other, in the way of reform in teaching reading, is George L. Farnham, who began teaching in Watertown, N. Y., in 1841, and has therefore, been a teacher for fifty-two years. He owes his strong impulse of investigation and progress to that great teacher of teachers, David P. Page, who was the principal of the State normal school at Albany, N. Y., in 1844. Under his inspiration he studied carefully the necessities of the children in his schools; he visited other schools and endeavored to find the best things. He gave almost his entire attention to primary schools. At first, he used the phonic method of reading, and followed it with apparent success. In 1869, he went to Binghamton, N. Y., and remained there as teacher and superintendent for eleven years. All this time he was a very diligent student of psychology, and applied what he gained from psychology to his work in teaching. He thoroughly convinced himself that the phonic and phonetic methods of teaching were defective, and also made up his mind that the so-called word method is simply a device, and is not in itself sufficient to be called a method. He discovered from his study of psychology and his practice in teaching children, that the sentence is the unit of expression, and out of this fundamental principle, he evolved what is now known as the "thought method of teaching reading," which goes under the name of "sentence method." This was the first great step in going over from the work upon dead forms of language, letters, sounds, and words, to the real use of reading; that is, reading is thinking, or it is nothing, and Mr. Farnham made thought the basis of teaching children to read. He recognized the natural, spontaneous power of the child to think in oral sentences, and to do the same thing exactly with written sentences. So the little folks, instead of learning the names of the letters, instead of going through a wearisome preparation in phonics, came with all their fresh and cultivated power, to the learning of reading in a perfectly natural, easy, and interesting way.

How easy it is to explain these principles and methods, now to intelligent teachers! Of course, it is not

generally recognized as the best method, but still all intelligent teachers will agree that the sentence method has its true foundation in psychology and sound peda-gogics; but that which all teachers should learn to know to appreciate, and to apply in their study, is the fact that the propositions which now seem so simple and plain to most thoughtful teachers, met with a bitter and prolonged opposition, especially on the part of teachers. The newspapers, board of education, and people of Binghamton, were unstituted in their denunciation of the new "fad," instead of welcoming the discovery that was to make the children's lives better and happier, they did all they could to make the discoverer feel that he was utterly wrong, that the schools were all right as they were, and that the interference of the new method would be highly destructive to the existing school work. One need not have the gift of prophecy in order to tell exactly what non-progressive artisan teachers will say when they are criticised, or are presented with ideas of reform: "Our schools or are presented with ideas of reform: "Our schools are the best in the country" "We tried that method long ago and it failed." "We have always used that method." "We don't believe in new-fangled notions." What such replies really mean is this: Our schools are all right as they are. There is nothing more for us to all right as they are. Truly, self-satisfaction is a sure sign of mental and moral decay.

The opposition to Mr. Farnham was of the same kind as that which confronted Horace Mann, as well as all other reformers who have given their best efforts to aid mankind. The lesson of these facts in regard to Mann, Webb, and Farnham, to teachers, is this; instead of using prejudice and tradition for your arguments against new methods, use your brains, your reason, and your common sense. Then the distance between true theories

and better teaching will not be so great.

In 1880, Mr. Farnham became superintendent of schools at Council Bluffs, Ia., and after three years' work, he accepted the principalship of the Nebraska normal school, to which he has given the best of his life in trying to instill the principles of true pedagogy into the teachers of the great West. He has built up the school and made it one of the best schools west of the Mississippi. Mr. Farnham was attacked by fever during the last year, and lay very sick in one of the large hotels in Chicago, for five weeks; his failing health has led him to retire from active teaching.

I desire, in this very imperfect sketch, to present my recognition of the great value of his work, and trust that my fellow teachers will study to know more of his heroic life and his magnificent work. How long will it be before a teacher need not be obliged to take his life (official) in his hand when he dares to apply a little of

the art of teaching !!!

×

"Throughout the Mohammedan dominions in Asia, in Africa, and in Spain, the lower order of Mussulmen entertained a fanatical hatred against learning. Among the more devout—those who claimed to be orthodox—there were painful doubts as to the salvation of the great Khalif Al Mamun—the wicked khalif, as they called him, for he had not only disturbed the people by introducing the writings of Aristotle and other Greek heathens, but had even struck at the existence of Heaven and hell by saying that the earth is a globe, and pretending that he could measure its size. These persons from their numbers constituted a political power."

×

"In the cephalic ganglia of insects are stored up the relics of impressions that have been made upon the common peripheral nerves, and in them are kept those which are brought in by the organs of special sense—the visual, olfactive, auditory. The interaction of these raises insects above mere mechanical automata, in which the reaction instantly follows the impression."

There will be no JOURNAL issued on the 22d and 29th of July. The next issue will be on the 12th of August,

The School Room.

How the Men Were Arranged.

(QUESTION REPRINTED.)

(QUESTION REPRINTED.)

[An American vessel cruising on the Red sea was captured by pirates. The American crew consisted of 15 men, the Captain included. Soon after, the craft to which the tars were transferred, sprung a leak, and the pirates decided to throw their prisoners overboard.

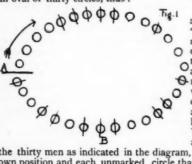
They made their intention known to the American commander, who, seeing the danger he was in, proposed that all hands form a line on deck and that every ninth man be thrown overboard, he counting himself in at every round. There were just as many pirates as American.

To this they all agreed.

He arranged them all in such a manner that every ninth man was a pirate until all the pirates were thrown overboard.]

I. L. HULSHOF.

Directly after the unsophisticated Red sea pirates acceded to the proposition of the unfortunate American commander, they went into the hold of the sinking vessel where was carried a large went into the hold of the sinking vessel where was carried a large quantity of stolen bric-a-brac, and each one securely fastened a horseshoe to the inner side of his jacket, just over the heart. Thus were they wont to equip themselves on all extraordinary occasions. But their delay wrought their ruin. Barely were they out of sight, when the cunning Yankee—an ex-school-teacher by the way—tore a fly-leaf from a copy of Bowditch's *Practical Navigator*, which he always carried with him, and hastily figured an oval of thirty circles, thus:



Then, commencing at any one of these, as "A," he counted round and round the O diminishing oval Othe direction of the arrow, crossing every Oninth circle and always omitting, as he counted, every circle already crossed, until but fifteen were left. When the pirates re-

B appeared, he arranged the thirty men as indicated in the diagram, "A" representing his own position and each unmarked circle that of one of his compatriots. Then the fun commenced. Never before was such attention secured and held by a teacher, as his finger, like the index of Fate, pointed out the "ninth" men in quick and unerring succession, and the unlucky pirates sank, to rise no more. The last one reached was the pirate captain (at "B"), and with the remark that he should never again trust for luck in horseshoes and odd numbers, especially "nine" and "fifteen," he took the fatal

leap and was seen no more.

Scholium 1.—In the contest of Science against Superstition, the

Scholium 2.—A man qualified to run a district school is more than a match for a nest of pirates, even on board their own ship.

Mt. Vernon, N. Y.

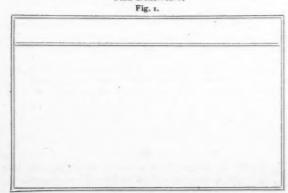
A. B. D.

Preparation of the Balance Sheet. By E. H. ATWOOD.

We were an hour or more one day drawing a balance sheet, copying it two or three times when we might have drawn it six or eight times if not more. Finally we used the five steps given below and had no trouble. Two things, as previously stated, are to be considered, the drawing and the writing of the sheet. The objects in both being three in number, vis., correctness, readiness, and ease and ease

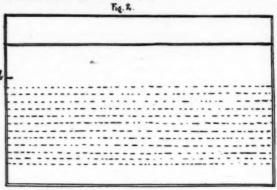
We suggest the following five steps as a quicker and more satisfactory way than those usually given:

THE DRAWING.



STEP I.

[NOTE—Use red ink in drawing all lines except those which are dotted, they being drawn very lightly with lead pencil.] Having determined the size you wish your sheet to be, draw fig. 1.

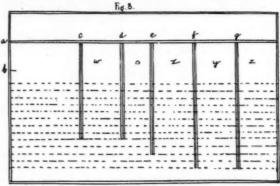


STEP 11.

Have pupils look in ledger and find the number of accounts

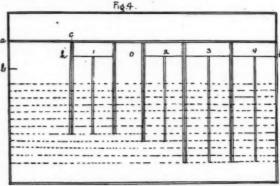
that do not balance.

Place a mark at (b) and rule (lightly) as many pencil lines as there are accounts and five more lines. Call these account-lines.

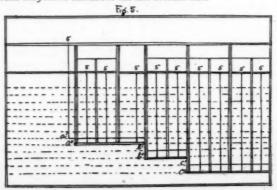


STEP III.

There will be six divisions, four of which (w, x, y, and z) we will make the same width. Mark, lightly, with pencil, on line (a) the width you wish the divisions. Then rule the triple lines (fand g) so that they touch the last account-line.



Next rule (e) also triple, so that it touches the *second* line above le last account-line. Rule the triple lines (e and d) so that they the last account-line. touch the fourth line above the last account-line.



STEP IV.

Beginning at line (c) draw line (h) midway between (a and b), being very careful not to cross the triple lines just drawn in the preceding step. Notice that the line (h) is omitted in division (o). Finish this step by ruling lines (double) 1, 2, 3, and 4. STEP V.

This step is very easy. Rule a double line at (b), being careful not to cross those already drawn. Rule the single lines (a', b'), and c'), and the double lines (a'', b''), and c''). Finish by drawing lines (5555555555) for dollar and cent columns and ledger folio. We suggest that the teacher practice the drawing of the sheet until thoroughly familiar with it. The pupils may then be easily led to do the same and the sheet, by them, placed, in a few moments, upon board, slate, or paper. Thus giving a chance to use it in class-work without aid of the text-book.

An Essay.

Essay on "Breath," by a schoolboy who has attended a course

Essay on "Breath," by a schoolboy who has attended a course of lectures in physiology:—

"Breath is made of air. We breathe with our lungs, our lights, our livers, and our kidneys. If it wasn't for our breath we should die when we slept. Our breath keeps the life agoing through the nose, when we are asleep. Boys that stay in a room all day should not breathe. They should wait till they get outdoors. Boys in a room make carbonicide. Carbonicide is more poisonous than mad dogs. A heap of soldiers was in a black hole in India and Carbonicide got in that black hole and killed nearly every one afore morning. Girls kill the breath with corsets that squeeze the diagram. Girls can't run or holler like boys because their diagram is squeezed too much. If I was a girl, I rather be a boy so I can run and holler and have a good big diagram."

Topics in Physiology. II.

LESSON ON THE DIGESTIVE SYSTEM.

By E. W. BARRETT, Milford, Mass.

those that prepare food, those that dissolve food. **Organs**

Mouth

position. number, color, mucous membrane, lips movements, nerve supply, flexible in horse,

alligator has none. number. position. chewing muscles, cheeks movements, membrane, sides of mouth,

position, shape (vaulted). flat in horse, palate use.

position, movements, color, muscle,

functions. tongue coated tongue, horse. rough, elevations, cow, compare cat. birds,

toad.

description, soft palate number. situation. teeth shape,

color. moistens mouth, saliva action. ducts

use

Salivary glands parotid. submaxillary, sublingual. names uses diseases (mumps).

situation, Pharynx 7 openings, back of mouth,

situation, length (9 in.), coatings (2), **Esophagus** cartilage (rings), feel in horse, action in vomiting.

situation. shape, muscular,

coats. Stomach movements, gastric juice (acid), openings cardiac, pyloric.

length (72 feet in horse), diameter,

coats. Small Intestine villi. glands

vermiform appendage (seeds entering).

3 sections (colors). Large Intestine rectum,

32 ft. long in ox. a gland, situation liver 2 lobes (lobules), bile.

pancreas situation, pancreatic juice, duct. Minor Organs position.

no duct. spleen use unknown.

gowth, to receive material for repair, Use / heat. to prepare food for the various tissues, uses of each organ.

importance of thorough chewing, mixing with saliva, drinks taken after chewing,

amount to eat, saliva takes the place of drink, violent exercise after meals, Care

sweetmeats, effects of over-eating. effects of tobacco. strong tea and coffee.

Trace a piece of bread lips seize (prehension), front teeth tear, back teeth grind (mastication), cheeks keep in place.

moves food. rolls up in little balls, pushes them to throat. Tongue

saliva | moistens, | changes starch to sugar. soft palate presses upward, œsophagus carries to stomach (deglutition). cardiac orifice opens, stomach moves (churns),

stomach moves (churns) gastric juice secreted, chyme forms, pyloric orifice opens, small intestines receive, pancreatic juice flows, chyle forms chyle forms, villi absorb, intestinal juices act, solution enters blood,

builds up tissues.

Feel mouth cavity (very large). Feel throat of horse while drinking. Feel throat of cow during the passage of the "cud" into mouth. When eating grass, how does the horse gather it into his mouth? The cow does it quite differently—what organ does she use? How does the elephant get food to its mouth? How does the stomach of the cow differ from that of the horse? Tell about the camer's stomach. The crop of a bird is only a storehouse, what is its gizzard? How does a bird drink? How does a dog or a cat drink? What animals gulp their food? How do the teeth indicate the kind of food animals eat?

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Physical Training. III.

By WILL TOWNSEND.

SUGGESTIONS FOR FIRST LESSONS,

Aims :- Use and care of the teeth-Thoroughness.

Aims:— Use and care of the teeth—Thoroughness.

Exercise: For digestion: For correct position.

The other day I saw two boys walking along. Each had a heavy basket. After a time one of the boys insisted upon the other carrying both baskets while he walked lightly along with nothing in his hand. Do you think it was quite fair to make one boy do the work of two? "No, sir." "I would not like it."

It is so with those good workmen who are building our temples. We have a whole row of little workers that are willing enough to do their share if we would only give them time. But we very often pass their work over to another who has quite enough to do without it. Of course, we do not intend to be unfair. What

without it. Of course, we do not intend to be unfair. What little workers am I speaking of, Nellie? "Our teeth, I think."

What can the teeth do? "They can chew." "They cut our food." "They grind it."

Yes; they separate our building material into small pieces so that the next workman, the stomach, can use it. Sometimes we are in a hurry—we have examples to do, or John or Jennie is waiting for us to come out and play,—and we eat so rapidly that we do not give the teeth time to masticate the food properly. We send it quickly down to the stomach before it is properly pre-pared. We make the stomach do its own work and that of the teeth. By and by the stomach gets so tired it cannot possibly do any more work and we feel sick. It is very important that we masticate our food thoroughly. You know that our temples cannot be sound and strong and beautiful unless each part does its share of the work well. What is it that we must be sure to do, Hannah? the work well.
" To eat slowly."

And we should take good care of these willing workers. What is prettier than a row of even, white, clean teeth? Who can tell me what we can do to preserve them? "Let them do their work." "Keep them clean."

Yes; give them enough of the right kind of work to do and keep them clean. How shall we keep them clean? "Brush them."

The teeth should be brushed carefully every night before we go

The teeth should be brushed carefully every night before we go to bed, and either brushed or rinsed thoroughly after each meal. You see how necessary it is that we do little things thoroughly. What is it you want to say, Kittie? "My mother says if we don't always do our best we fall into bad habits." Kittie's mother is right. It would have a bad effect upon our whole nature to do anything but our best. Suppose one of the builders of the beautiful church on the corner should say, "Well, I have only three or four more stones to put in this wall and I'm not going down the ladder for more mortar so I will just lay these not going down the ladder for more mortar, so I will just lay these stones in without mortar. What would be the result? "The stones would fall out some time." It would leave a hole in the wall." And then? "The part of the wall above might tumble down."

down."
Yes; the whole building might be destroyed because one workman did not do his work thoroughly. And even more.
What would happen if one of the stones should fall upon a person walking along the street? "It might kill him." So with little things we do carelessly. They not only harm us, but they teach some other girl or boy to be careless and perhaps to acquire a habit that would in the end make him a bad man. His temple might be ruined. What are we to remember from our lesson? "To eat slowly and do things well and thoroughly."

I will write on the blackboard, Eat slowly and masticate food thoroughly.

thoroughly.

We will now learn a few exercises that will help our food digest, that is they will help our stomach and other (intestinal) organs do their work. (Children should be cautioned against cracking nuts, with their teeth: also against eating unripe or unsound fruit, etc.)

I. Stand erect, hands hanging idly at the side, weight of body forward on arch of feet. Rise on ball of foot, Vibrate up and down without allowing heels to touch the floor, knees flexible. Rapid movement when correctly learned.

All flexions of the torso, bending at the waist or hips (see ex-

All flexions of the torso, bending at the waist or hips (see exercises given by me in former papers, SCHOOL JOURNAL).

2. Palms together high over head. Bend torso at the hips, forward, gradually closing hands, bring them down to the knees, torso and arms moving in unison. Back to position.

3. Left hip forward, incline torso to the right, bending body at the hip, and at the same time throw left hand over the head, gradually closing left hand and reaching with the fingers of the right hand as far below the right knee as possible.

4. Right hip forward, reverse movement, with right hand thrown over the head, etc.

5. Combine the two movements, alternating left and right hands.

6. Hands hanging idly at the side, gradually closing the fingers, throw the hands over the head, at the same time incline the torso backward, bending at the hips.

7. Mount the stairs, always observing an erect position of torso and head, chest elevated and lungs inflated.

Jumping when not induged in to excess is also good for the digest-

ive organs and the circulation. Football is another good exercise I do not know of any game better calculated to inspire a boy with manly courage. In the school boys' football the probability of injury is reduced to a minimum if the contestants compare favorably in size and there is no great disparity in age.

The movements outlined above are given in connection with this lesson, for convenient reference. It should be understood, however, that no exercise is to be taught until the pupil's mind and muscles are prepared for it. As to this, the condition of the child is the only safe criterion.

child is the only safe criterion.

Seven Ages of Man.

- 1 Pinky cheeks, Puggy nose, Wonder eyes, Restless toes, Father's pride, Mother's pet; That's a baby, You may bet.
- Strongly lung'd And never still, Mischief full, Hard to kill, Slow to school. Seldom coy, Fond of noise; That's a boy.
- Self conceit, Would be wise, Apes the man, Knowledge buys Strokes moustache, If, forsooth, It has grown That's a youth.
- 4 Proud of strength, Full of life, Falls in love, Takes a wife, Daunt his heart Nothing can; Always such, A young man.
- 5 Slightly bent, Business care, Mind intent, Pleasure rare, Hand to plough, Storms may rage, Can't turn back; Middle age.
- 6 Struggling still, Hoping on, Years fly by, One by one, Leaving each As it ran, With regret; An old man.
- 7 Whitened hair, Nerveless frame, Future dim, Past a name, Blurr'd to him Life's long page; Man's a child In his dotage.

-Selected.

[Fourth year children should appreciate this and learn from it to sympathize with the aged.]



An Insect Study.

The grasshopper is a good subject for a class lesson and a large supply may be obtained during the summer months and kept in alcohol, until any convenient time during the winter. You can alcohol, until any convenient time during the winter. You can make your own net with a piece of stout wire for the bow, a long stick for the handle, thin wire to wind tightly over the joining, and cheese-cloth or mosquito-netting for the bag. the joining, and cheese-cloth or mosquito-netting for the bag. Make the bag deep, so that the insects cannot easily escape. Take your alcohol bottle with you and put the insects into it as fast as you catch them. Leave them in the alcohol as long as you like. When the time for the lesson approaches, take them out and dry them; pierce each with a sharp pin, being careful not to crush them; stick the pin into a cork, with the insect near the head, so as to be open to observation on all sides, and give one, thus mounted, to each pupil each pupil.

Lead children to observe and report the following facts:

The head is flattened vertically in front.
 Theeyes are full and oblong. (Explain, if grade demands,

that they are compound.)

3. The antennæ grow out of grooves in front of the eyes, and are finely jointed, like those of a lobster. (Explain that these are organs of touch and very sensitive. Also that some people think that insects talk a sort of deaf and dumb language with these antennæ, and that ants have been observed to feel one another all over with them, as though they recognized their friends in

this way.)
4. Looking down upon the head it looks three-cornered, and back of it is a high collar or short cape. (This is called the pro-

5. Two wings grow out from under this pro-thorax. (This is not the only pair of wings, but it may be impossible to observe the others without breaking the insects to pieces. There is another pair, broader and more delicate, folded like gauze fans under-

neath these wing covers.)

6. There are three pairs of legs, the first and second pair grow-

ing out at right angles to the body or nearly so, and the third pair growing parallel to the body. (Ask why the first two pairs are walking legs, but the third pair are springing legs, and the may give a good spring forward. Ask how many modes of locomotion this insect has. Flying, walking, and jumping.)
7. The legs have two long parts besides the joints in the feet. The thigh part of the springing legs is very thick. (Here are massed the strong muscles that enable the insect to jump many times its own length.)

times its own length.)

8. The second joint of the springing leg has rows of little projecting points upon it. (These are comb-teeth. With this natural implement of the toilet, the fly, the grasshopper, or other possessor of such means, brushes himself all over.)

9. If pupils have glasses, they can observe the joints of the feet, with the little sucking disks upon them that enable the insect to retain his hold upon a vertical surface. (The members are all (The members are all

(10. Observing underneath, the thorax is seen to be in three parts. (The pro-, meso-, and meta-thorax.)

11. Back of the thorax the insect has a long body, composed of ring-like joints. (The abdomen.)

12. This ends in the mother-grasshopper, with four sharp-pointed protuberances. (With these the mother digs a hole in the earth in which to deposit her eggs. She closes these four points into one, projects them into the ground, and then spreads them apart, making a little hole. Closing and thrusting them deeper and spreading them again, she enlarges the hole. This she repeats until she has made it as deep as she wants it.)

The young grasshopper when he outgrows his skin, splits it down the back and works himself out of it, and the delicate skin in which he thus

comes forth soon hardens like the old one.

SKELETON COMPOSITION.

The body of the insect hasparts: -, which are the organs of -Out of the head, grow the -Out of of the -, grow -- pairs of wings and

legs.

The first —— pairs of legs are for —— and the third pair are

The jumping legs are very — and —. They have uscles on the — part, and rows of sharp points on the They have thick muscles on the -With those points, the insect and part.

over.

The thorax is in —— parts and the abdomen in —— ring-like

Words Needed for the Blanks.

walking. lower, thorax. head. abdomen, long, touch. upper, strong, antennæ, jumping, brushes. three, combs. many.



Study of the Bee.

By GEO. A. SANBORN, Rochester, N. H.

By Geo. A. Sanborn, Rochester, N. H.

These lessons on bees were given to a primary and a grammar school class. With modifications they might be used in other grades. The average teacher will need to prepare herself for these by a study of the material, using some standard work on bees. The A B C of Bee Culture, by A. I. Root, of Medina, O., is good. While containing some things of interest to the practical bee-keeper only, it is a complete encyclopedia of information on the subject and is not expensive. In grammar grades the book may be placed in the hands of the pupils with certain assigned topics to be read up. There are books especially for children, on bees. These should be placed in the hands of pupils of all grades if possible. Some points of the outline should of course be omitted for primary classes. These outlines are intended to be suggestive merely. The teacher who studies up the subject to interest her class cannot fail to do so, as well as interesting and instructing herself. In studying the structure of the bee, the teacher will do well to discriminate between those points which are characteristic of insects in general, and those which are peculiar to bees only. A text-book on zoology or entomology is a convenience, but not a necessity. A few good magnifiers is all that is necessary to bring out all the points in the outline.

The class should have a supply of new worker and drone comb, queen cells, old brood comb, bee bread in the comb, comb filled with honey, wax, propolis, model of comb, specimens of worker, drone, and queen bees. To get the material necessary for the lessons make friends with some beekeeper. He will be willing to furnish gratuitously what you need, except a model of the comb. He will also give much information of service to you.

By cutting off an eye with keen knife and soaking it in water the pulpy matter can be scraped from the inside so that the thin outer coating of the eye will be transparent. The facets of the compound eye can now be seen under a good magnifier. Bring

boiling a small piece of old brood comb in alcohol. The wax dissolves leaving the old skins behind.

Under the mathematics of the honey comb it can be shown that no other shape of cell except the square or the equilateral triangle will fit together as the hexagon does without loss of space between the cells. The square or triangle would not fit the body of the bee, and space would thus be lost inside the cell. A cardboard model of the comb can easily be made large enough to show its true form. The foundation and two or three cells are all that need be shown. This is quite important to a full understanding of the comb by the pupils. Mr. Root in his book gives hints for this construction.

In the study of wax the writer performed an interesting, and to him unheard of experiment, showing that beeswax is similar to fat in chemical properties. A piece of the wax was boiled with a solution of caustic soda, A substance was obtained free from alkali and soluble in water, having the general properties of soap.

OUTLINE.

1, Body.—Solid framework on the outside covered with hair. Composed of how many principal parts?

2. Head.—Tongue, its structure, uses. What other animals with similar, and what with different tongues? Eyes, structure, position, lack of motion, size compared with head, difference in the eyes of the drone. How like other insect eyes and different from the eyes of the higher animals? Antennæ, their use; antennæ of other insects and lobster; whiskers of a cat.

3. Thorax.—Legs and wings attached here. Wings, how

tennæ of other insects and lobster; whiskers of a cat.

3. Thorax.—Legs and wings attached here. Wings, how many, shape, structure, veins, short hair-like appendages seen under microscope. Legs, how many; how many joints; use of these claws especially in swarming? Pollen brush on fore-legs; pollen pocket on hind-legs.

4. Abdomen.—Number of rings, color of rings. Italians and others distinguished from native bees; wax pockets; the sting and

its appendages.

5. General Anatomy,—Sex of the worker. Compare the anatomy of the drone and queen with that of the worker, noting abof the working and working implements in the drone. Which of the points of anatomy which we have studied are peculiar to the bee, and which are common to all insects? Does the drone, queen, or worker, have least of the bee peculiarities? What evidence that the bee has all the senses?

6. Life of the Bee.—Eggs laid where? Grub, chrysalis—time in each stage? Effect of chrysalis skins on brood comb. Work of the newly-hatched bee. Division of labor in the swarm. Food of the growing bee. Pollen, bee bread; how prepared, how fur-

rished the young bee? Artificial substitutes for pollen. Royal jelly. Food of adult bees.

7. Propolis, Bee Glue.—Its probable source; uses in the hive; color; odor; taste; effect of heat and moisture; effect of alcohol; effect of fire; similarity to other gums.

8. Honey.—A sugar; experiments to prove this. Sources of honey—flowers; honey; dew; sweets in city refuse; cider mills; fruit, sugar orchards. Quality of honey as affected by the season. wet or dry, and the source from which the honey came. Candied honey. Honey as a medicine. Its commercial importance now and before the use of sugar. Discussion of the unsettled ques-

tion: Do bees make honey or gather it?

9. Honeycomb.—Its uses in the bee economy. Difference between worker and drone comb. Queen cells. Some peculiar-

ities in the building of comb.

10. Mathematics of the Honeycomb.—Why the cells are sixof cell. Rule for construction of bottom of cell. Why made thus? Why does not each cell on one side of the comb exactly correspond with a cell on the opposite side in position? What is the relative position of cells on different sides of the comb?

is the relative position of cells on different sides of the comb r. Notice variations in this arrangement especially in crooked comb.

11. Wax.—Physiologically speaking a fat. Chemically not a fat, but similar to fats in composition and chemical and physical properties, Production of wax by the bee. How prepared from the comb and bleached? Food value; properties and uses. Is it economical for the beekeeper to produce wax for market?

In South America the banana is not thought of as a luxury. In fact, it takes the place of bread and meat and vegetables among fact, it takes the place of bread and meat and vegetables among a large part of the people. Every garden has its banana patch, just as we have our indispensable rows of potatoes. On the isthmus of Panama the cars spin past hills covered from base to summit with the beautiful broad leaved plants, their great clusters of fruit hanging from the stems just under the leaves, The banana plant looks something like an immense calla lily. Its stem is made up of the bases of the leaves, so sheathed or folded around each other and hardened as to sustain the weight of the mass of foliage above. It will in some localities attain a height of twenty feet. When two years old it bears fruit and then dies, but a feet. When two years old it bears fruit and then dies, but a number of young shoots spring up from the base of the old stem, so that it continually renews itself, and the farmer, who is usually an Indian or a negro, has no trouble except to keep the weeds and the old withered trunks cleared away from the growing plant. Even the trunk is of use, for it contains a fiber almost as soft as silk, which can be woven into the most exquisite muslins. Indeed, some of the dainty Indian muslins are made of this very fine fiber. -Harper's Young People.

Supplementary.

September.

The golden rod is yellow, The corn is turning brown; The trees in apple orchards
With fruit are bending down;
The gentian's bluest fringes Are curling in the sun; In dusty pods the milkweed Its hidden silk has spun.

The sedges flaunt their harvest In every meadow nook, And asters by the brookside Make asters in the brook. From dewy lanes at morning The grape's sweet odors rise; At noon the roadsides flutter With yellow butterflies.

By all these lovely tokens, September days are here, With summer's best of weather And autumn's best of cheer.

-Selected.



Sundown.

(Recitation for a grammar pupil.)

Now sky and wood and upland Are drenched with crimson rain. The mellow clink of cow-bells Is coming up the lane. Now arrowy swallows, cheeping, Their circling comrades hail; While ping-a-pang-a-ping-a Goes the milking-pail.

Now ducks come waddling homeward, And geese, in single file; And chickens fly to branches, Or top the old wood-pile. Now bats leave barn-yard crannies, And dusky grows the vale; While swish-a-swash-a-swish-a While swish-a-swash-a-swish-a Goes the milking-pail.

Now katydids wax testy, And crickets wh.sper "sleep!" And sudden sparks of fireflies Pulse through the shadows deep. Now dimmer grow the meadow, Vined wall, and zigzag rail; While frith-a-froth and homeward Goes the milking-pail.

- Selected.



Patriotism.

(A Recitation for Columbus Day.)

(A Recitation for Columbus Day.)

"There is a land, of every land the pride, Beloved by Heaven, o'er all the world beside; Where brighter suns dispense serener light, And milder moons imparadise the night; A land of beauty, virtue, valor, truth, Time-tutored age, and lowe-exalted youth; The wandering mariner, whose eyes explores. The wealthiest isles, the most enchanting shores, Views not a realm so bountiful and fair, Nor breathes the spirit of a purer air; In every clime the magnet of his soul, Touch'd by remembrance, trembles to that pole; For in this land of Heaven's peculiar grace. The heritage of nature's noblest race—
There is a spot of earth supremely blest, A dearer, sweeter spot than all the rest, Where man, creation's tyrant, casts aside. His sword and scepter, pageantry and pride, While in his soften'd looks benignly blend. The sire, the son, the husband, brother, friend; Here woman reigns; the mother, daughter, wife, Strew with fresh flowers the narrow way of life; In the clear heaven of her delightful eye, An angel-guard of lowe and graces lie; Around her knees domestic duties meet, And fireside pleasures gambol at her feet.

"Where shall that land, that spot of earth be found?" Art thou a man?—a pairtot?—look around; Oh, thou shall find, howe'er thy footsteps roam, That land thy country, and that spot thy home!

—James Montgo es Montgomery.

The Coming Home,

By ANNAH L. LEAR.

(Hearing a mother say, "The children will soon be home from vacation, ad I dread it," made me wish to say to every parent, "Don't!")

The long vacation all is o'er, They're coming home from mount and shore; They drop the gun, the rod, the oar, To grasp again the book and pen; Dear little maids and little men— O bid them welcome home!

For haply on their cheeks so fair They bring a glow from mountain air, And in their eyes what sheen is there! While the frail arm on "Grandpa's farm" Has gained a new and rounded charm, Proudly displayed at home.

And O the treasures that they bring, And O the pleasures that they sing. The mem'ries fond of everything. Which through the year their hearts will cheer, Beguiling many an hour else drear, Till next vacation come.

O fathers fond, and mothers dear, Let not the twice-told tales you hear Fall on a vexed, unwilling ear ! So not the least in mem'ry's feast, When childish joys for them have ceased, May be the coming home.



Trials of a School Teacher.

A DIALOGUE.

Teacher.—If there were three peaches on the table, Johnny, and your little sister should eat one of them, how many would be left?

fohnny.—How many little sisters would be left?

Teacher.—Now listen, Johnny—If there were three peaches on the table and your sister should eat one, how many would be left?

Johnny.—We ain't had a peach in the house this year, let alone

Teacher.-We are only supposing the peaches to be on the

table, Johnny.

Johnny.—Then they wouldn't be real peaches?

Teacher.—No.

Johnny.—Would they be preserved peaches?

Teacher.—Certainly not.

Johnny.—Pickled peaches?

Teacher.—No, no; there wouldn't be any peaches at all, as I ld you, Johnny. We only suppose the three peaches to be told you, Johnny.

Johnny.—Then there wouldn't be any peaches, of course, Teacher.—Now, Johnny, put that knife in your pocket, or I will take it away; and pay attention to what I am saying. We imagine three peaches to be on the table.

Johnny.—Yes.

Teacher.—And your little sister eats one of them and then goes

away !

Johnny.—Yes, but she wouldn't go away till she had finished the three. You don't know my little sister.

Teacher.—But suppose your mother was there and would let

her eat but one? Johnny .- Mother's out of town and won't be back until next

Teacher.—Now, Johnny, I will put the question once more, and if you do not answer it correctly, I shall keep you after school. If there were three peaches on the table and your little sister should eat one of them, how many would be left?

Johnny .- (Straightening up) .- There wouldn't be any left. I'd

grab the other two.

Teacher.—(Touching the bell.)—The scholars are now dismissed. Johnny White will remain where he is.—Selected.



Like miser's gold when death draws on apace, Like lover's kiss when parting is at hand, Like yearning looks that seek a loved one's face As ebbs the last of life's retreating sand-

So is the golden-rod; the summer wanes;
We think not of the roses of the past,
But love this flower, less fair than they, because
We cannot keep it, and it is the last. -Detroit Free Press.

Editorial Notes.

All visitors to the Fair who are interested in educational progress are cordially invited to visit the exhibit of teachers' journals, books, school-room helps, etc., from the press of E. L. Kellogg & Co. It is situated in the Liberal Arts building, northwest corner.

The teachers have a vacation of nearly ten, twelve, fourteen or sixteen weeks. At the South it is much longer; cases exist when it extends over twenty-four weeks.) The editors of THE JOURNAL welcome their short vacation of two weeks, from July 22nd, to August 5th; and during that time no issues will be looked for. This short breathing space will be as acceptable to the printers, the clerks in the various departments, as to the editors. Yet as in years past letters will come saying, "I received no JOURNAL for July 29th and August 5th.

The educational machine hitches along, first one corner, and then another. This is better than standing still, though the gait is ungainly. The lingering of word worship in school practice, even in spots where theory has apparently shaken its wings free of such burdens, is sometimes a little discouraging. We have before us a school report which discusses education in a general way most thoughtfully, makes a sudden drop in the suggestion of means of teaching to a great barrenness of practical resource in applying its own philosophy, and under "Studies," actually forces upon the teachers of a whole state, the wretched practice of teaching homonyms. The skilled teachers of this state must recognize in their official leaders good lecturers on pedagogical progress, but bad directors in the detail of work. Reason has a hard time of it in "downing" our old superstitions. They seem to be in the blood. to be in the blood.

Philadelphia has discarded the Grube System on the following grounds:

"This system of combining four or five operations from the be-ginning of instruction in arithmetic is opposed alike to the phil-osophy of the science of numbers and the natural development of the mind of the child. Addition and subtraction are fundamental processes of arithmetic, while multiplication and division are derivative processes from these fundamental ones. The old writers on arithmetic were correct in saying that multiplication is a short process of addition, and division is a short process of subtraction. To attempt to teach these four processes simultaneously is thus to attempt to teach derivative processes before the child has a clear idea of the fundamental ones. In the historical development of the science there is no doubt that the fundamental processes antedated the derivative processes, and the historical order of development usually indicates the correct order of primary instruction. Besides, in the natural development of a child, it will be seen that it obtains sums and differences long bechild, it will be seen that it obtains suitins and underletees long before it begins to derive products and quotients, and its operations with fractions are still longer delayed. It is thus clear that the attempt to use the Grube System with young children often resulted in confusion and failed to secure the results desired."

Mr. Hans Ballin, who is well known to the readers of THE JOURNAL and THE INSTITUTE by his contributions, has accepted the position of teacher of physical culture, physiology, and hygiene in the state normal school at Platteville, Wis. He was formerly supervisor of physical culture at Sandusky, Ohio.

The summer school at Normal Park, conducted by Col. Parker, has already enrolled 500; this, when the attractions of the World's fair are taken into account, is really phenomenal. It shows that the ideas expounded there are sought for. Certainly Colonel Parker holds his own well. Ten years have gone by since the "Talks on Teaching" were published, and the desire to follow his work is not abated. There were those who thought his influence would last but for a short time; it has culminated into a movement.

Supt. Emerson, of Buffalo, N. Y., is evidently making an hon-est effort to serve the best interests of the schools under his charge, and not to allow politics to interfere with his administration. It had been intimated that in making his appointments for the ensuing year, he would "drop" the majority of those teachers who received positions under his able predecessor. But this has not been the case. The Buffalo *Times* writes:

"The superintendent has dropped a few teachers. In doing this he has not pursued a course different from his predecessors. * * * Certainly Mr. Emerson pays a high tribute to ex-Superintendent Love. He finds that seventy-six out of eighty of even the probationary appointments should be continued, being excellent in all essential respects. Only four of Mr. Love's probationary appointments were denied continuance."

Considering that in Buffalo the superintendent has full power to reappoint whom he chooses. Supt. Emerson's sincere impartiality must be highly commended.



THE STATE OF WASHINGTON

has its educational exhibit in its own state building. The latter is remarkable for its size, its unique architecture, and its thoroughly representative nature. Nearly, if not quite, all of the material for the building was supplied by Washington. The interior is finished in woods of the state and the foundation is built up of its mammoth tree trunks. One of these bears this inscription :

"This log, 3 feet by $3\frac{1}{2}$ feet, 125 feet long, was cut from a Washington yellow fir tree 7 feet 11 inches in diameter and 340 feet long."

The flag-staff in front of the building is a single piece 215 feet

long.

The educational department is represented by the exhibits of Spokane, Seattle, Tacoma, Olympia, and a considerable showing from the rural schools.

from the rural schools.

The cities of Washington have uniformly excellent school buildings of very recent architecture. Their teachers' meetings are on an organized plan. The teachers come together monthly by grades and also in a general meeting.

Considerable clay work is shown. The native clay is very light in color, almost white, and is well suited to school work. Experiments are being made which will eventually lead to the production of fine china from this material.

Gymnastics are prominent in the exhibit. In the girls' classes

Gymnastics are prominent in the exhibit. In the girls' classes the divided skirt is used. Much high school work is shown in drawing and color. Seattle's primary studies in minerals, insects, and plants will command attention.

A NEW YORK SCHOOL.

The material from the University of the City of New York is crowded into one alcove. It is rich in the heirlooms of science. The first telegram ever wired (this by Prof. Morse) is shown. This is its content:

"Attention !- The universe by kingdoms-right face!-March !

On the opposite wall appears the first sun print (photograph)

On the opposite wall appears the first sun print (photograph) ever taken. In the photographic department are specimens of the astronomer Draper's moon photography.

Much of the space is devoted to the School of Pedagogy. Dr. Jerome Allen's library of old-time text-books makes one case a mine of interest. One is the oldest primer ever published. With them is a copy of the old New England "Blue Laws."

The following charts are selected from a group prepared by students of the school:

No. 972. Early Educational Manuments.

No. 977. Early Educational Movements. By Austin Knoblach.

Shows graphically the rise of the educational spirit in England of France. Alcuin leaves Briton for France under the patronage of Charlemagne. His movements there and also those of his noted pupils.

Graphic chronology of the early movement in England, beginning with the historian Bede (673-733).

No. 978. Early German Schools.

By H. Pfennigwerth.

Locating and dating, on map, the schools founded under Roman empire; cloister schools, cathedral schools, universities, Latin schools, and Jesuit schools. The oldest of the universities was founded at Prag in 1348.*

No. 979. German Education.

By A. J. Kinnaman. Showing rise and fall of early systems in Europe. Knightly education began in the 9th century and terminated in

The parochia and cathedral schools attained their flood of power in two periods (about 700 and 1700). With the latter date began a uniform decline to the present time. During the three centuries preceding the 16th, the power of the monks over the people was complete. It was broken about the close of the 15th century by the tendency which culminated in Luther.

The secular schools had their origin late in the 9th century and the chart choirs their steady development to the present date.

the chart shows their steady development to the present date. The later growth becomes classified as *Vorschulen* (primary schools for the wealthier classes) and *Volks schulen* (people's

^{*}This is ante-dated by the University of Paris, founded somewhere from 1150 to 1170.

schools) which latter evolve into the present type, the common Chart 987. Test for Eye-mindedness and Ear-mindedness. school.

The growth of the universities is shown from Prag (1386) up to the present. Before the middle of the 9th century, twenty-five

The first normal school was that of Ilfield (1571). That of Halle appears about 1700, made famous by Franke's policy. In 1760 the school system was freed from the domination of the church and in 1817 the departments of state and education were sep-

arated.

The final channel shows the rise of the German gymnasia (equivalent to our high schools and academies), from their beginning in Breslau (1267—first Latin school) to the present. The rivals the voltage schools and academies, from their beginning in Breslau (1267—first Latin school) to the present. The gymnasium rivals the volks schule in its development. Its growth is accompanied by that of the higher schools for girls* and later by the so-called real schulen—whose tendency was to relinquish language study beyond the mother tongue and fill the place thus gained with the sciences.

Halle instituted the first real schule. The date given is 1738, though its tendency was realistic to a very practical extent as

Non-sectarian instruction in the German schools dates as early as 1779.

Chart 980. English Education.

By A. J. Kinnaman.
The earliest schools are those of the church, the line beginning with St. Germanus and St. Lukus about the middle of the 5th century. Church schools of the 12th century taught young women to work, to read English and sometimes Latin. Every convent supplied one or more free teachers.

The universities and endowed secondary schools both begin late in the 9th century (Oxford; Hereford). Cambridge was founded early in the 11th century. By the year 1500 about 350 endowed schools had been founded.

Government interest and support began about 1425 and receded to a very low ebb during the 17th and 18th centuries. Is now at its

highest mark.
Bede, Alcuin, Egbert, and Alfred are great names associated with the early centuries of English education; and of the later the chief are Spencer, Quick, Browning, Sully, Arnold, Bell, Miss Edgeworth; Locke, Bacon, Shakespeare, Milton, Cranmer, Tyndale, and Ascham.

Chart 993. Education in France.

This chart, as did the English, places the names of Alcuin, Charlemagne, and Rabunus in the forefront of the joint educational tendency of the 8th-9th centuries.

The cathedral and parochial schools ante-date this chart; which begins with the year 700. Parallel with the parochial schools, the secular, town, guild, and private schools gradually rise, from an original departure about 1050 to the beginning of the present century, since which time no schools have been allowed to be established without government control.

The higher education was born with the University of Paris

about the middle of the 12th century.

The Jesuit schools began their rapid rise late in the 16th cen-In 1805 the entire monastic and cathedral system became subject to state supervision.

From 1200 to 1500 knightly education flourished. The first normal school was that of Reims (1685).

Chart 981. Evolution of the New York School System.

The first schools were established by the Dutch in 1633. This line attains its breadth about 1760 and diminishes up to date. In 1702 free grammar schools were established (English). The board of education had a triple origin in the Manumission

The board of education had a triple origin in the Manumission Society (1778); Female Association for the poor (Quaker, 1802); and the Free Public School Society (1805). These amalgamated, the final union in 1847 inducting the present board.

The "Free Academy" (1847) became the nucleus of the later College of the City of New York.

The New York City normal school (1844) joined with the female normal school (1867) and became the present Normal col-

lege.
The first state appropriation was made in 1795. In 1849 free schools were established and in 1867 the rate bills were abolished.
The first teachers' association was started about 1797. The tendency toward co-operative action continued without a break mate the present.

up to the present.

The academies had their start in 1780; flourished about 1830, from which date they declined rapidly, by reason of the school tax and the rise of the common school.

The state normal school system had its beginning about 1845.

Chart 982. Independent Normalism.

By A. J. Kinnaman.

Comparing private normal schools; their date of organization where organiser was trained; the present yearly attendance and the approximate total attendance. Lebanon (1855) appears as the venerable parent of them all,

*Wittenberg organized the first girls' higher school in 1525.

Made by Students.

"400 chances were given in sight and 400 in hearing. These were balanced as to difficulty and arranged to alternate. The tests were made upon 67 pupils and then upon 36 teachers."

The chart demonstrates that some persons receive impressions

more securely through the eye; others through the ear; e.g., the eye is more alert in its function in some, the ear in others. The deduction is that the teacher should ascertain the individual pupil's condition in this respect and utilize the most active channel for impressing forms; of course by other study striving to bring the dehcient organ of perception up to the normal line.

Chart 989. Showing tests for school-room ventilation. Apparatus is exhibited by which these tests were made.

Chart 991. The Hygiene of the Eye.

Showing tests of various English text-books as to their conformity with the demands of eye-hygiene. 'Very many of the standard text-books fail in some of the tests.

"Any type which is smaller than 1.5 millimetres is injurious to the eyes.
. In future I would have all school authorities, with measuring rule in hand, place upon the 'Index Librorum Prohibitorum' all school books which do not conform to the following measurements: The height of the smallest 'n' must be at least 1.5 m-m., the least width between lines must be 2.5 m.-m., the least thickness of the 'n' must be 2.5 m.-m., 'the shortest distance between the letters .75 m.-m., the greatest length of the text line 100 m.-m., and the number of letters on a line must not exceed 60."

-The Hygiene of the Eye in Schools. HERMANN COHN, London, 1886.

(4)

(3)

A Totem Pole.

THE ANTHROPOLOGICAL BUILDING

is to be classed among those of professional interest to teachers. Here are shown the customs, modes of living, and home surroundings of tribes and lesser nations in all parts of the world. The building is the largest in the extreme southern quarter of the grounds. In its vicinity are grouped habitations, sea-boats, and other appurtenances too large to be profitably installed in the building. Archælogy and ethnology are departments in this ex-

There is a large model of the village of Skidegate, Queen Charlotte island, British Columbia.

"The villagers are divided into three groups, or clans, living in

different parts of the village.

Each house has its totem pole, rising to about twice the height of the roof. The houses are wood, and of substantial, rugged construction; rectangular, with peak roof. The entrance is usually a circular hole, often cut through the base of the totem Our illustration shows the:-

Totem of the Kah towl ah loot loo skow (Rain-

bow House).

The figures read from below upward.
(1) The grizzly bear with 'bear's ears,' a head ornament worn by people of high rank at festi-

vals.

(2) The rainbow, represented by man with dark body, the rainbow tints on his forehead.

(3) The raven.

(4) The wolf (Crest of Raven Phratry).

The totem is of the nature of a coat of arms. Thus Mr. Bear, perhaps of the Bear Clan, will have the bear as the fundamental emblem of his totem; while the embellishments will treat more of his indi-Often the crowning vidual pretentions. emblem of the pole indicates the claim of the owner to rank and fame. In one in-stance outside the Anthropological build-In one ining Mr. Bear (?) sits seriously at the top of his thirty foot accumulation of bears and ravens, etc., while on his head rests hat of monstrous height, the crown measured off by eight successive rings—indicating his greatness. The tongue of the figure is drawn out and down, by reason of an immense frog hanging from the tip. Mr. Bear assists the frog in

maintaining his grip by holding up the reptile's front feet.

Study of the totem symbols reveals a crude mythology, the bulk of which is probably as yet unsecured to science.

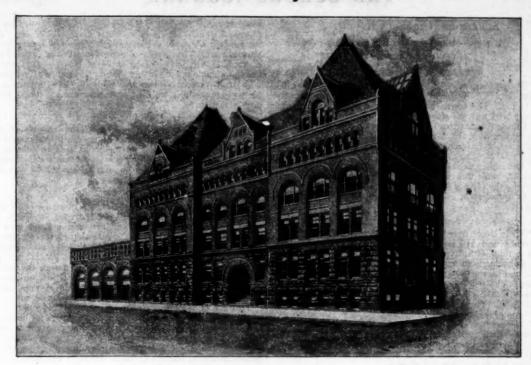
These Indians have invested the features of their environment with mythical characteristics and significance which here and there develop into finished myths.

The sun and moon, the frog, the hawk, the dogfish and whale, but chiefly the bear and the raven, figure in these representa-

In one myth, the raven, with the hawk as his companion, travels over the world, liberating sun, moon, and stars, and creating rivers, fish, and berries.

WALTER J. KENYON.

^{*}There would appear to be a question as to the figures in this case.



Armour Institute.

Armour institute, Mr. P. D. Armour's splendid contribution to the cause of education, originally had in view industrial training for boys and girls rather than the comprehensive scheme of technical education to which it is now committed. Some of the purely industrial features are retained, nor is their importance slighted. But the later form of organization is due to a conviction of the need in Chicago of a school for high class technical instruction. These two ideas have happily influenced each other giving to the industrial work, as planned, a more thoroughly scientific basis, and making the technical departments schools for the practical application of science, and not mainly for theoretical instruction. It will be a specific aim of the institute to provide men capable of addressing themselves in a practical and efficient manner to the solution of the various engineering problems.

The plan of organization by departments secures unity, together with the largest expression of individuality. The academic department co-ordinates all the curricula of preparatory and technical studies and embraces, first, the scientific academy, which has a Latin, and a science, a technical course, and fits students for colleges in general, and for the advanced courses of Armour institute in particular; secondly, the technical college, in which are included the advanced technical courses, each four years in length. Courses in mechanical, electrical, mining, and civil engineering have already been established. The technical work of each course is conducted in a separate department, each being exclusively under the charge of its own director.

The officers of Armour institute are:

Frank W. Gunsaulus, D. D., president.

Thos. C. Roney, A. M., director of the academic department.

Ernest W. Cooke, director of the department of mechanical engineering.

Wilber M. Stine, M. S., director of the department of electrical engineering.

Herman Haupt, Jr., M. D., Ph. D., director of the department of mining engineering.

 Mrs. Mary A. Hull, director of the department of domestic arts.

Miss Katharine L. Sharp, Ph. M., B. L. S., director of the department of library science.

Miss Eva B. Whitmore, director of the normal department of kindergartens.

Isaac S. Dement, director of the department of commerce.

The institute is receiving many applications and bids fair to

open on the Fourteenth of next September with a large initial attendance.

Armour institute is avowedly a Christian school, and Christian standards of culture will be recognized, but without any intrusion of denominational or sectarian bias. The drill of the class-room and the work-shop will be reinforced with whatever contributes to elevation of sentiment, purity of taste, and refinement of manners. The institute library and the department of art will minister to this end, and the student's horizon will be widened by courses of lectures, by addresses from distinguished men and women, and by musical and dramatic recitals. The social as well as the intellectual life of the institute will be fostered by literary, scientific, and art clubs, and by the cordial relations which it is the intention of the president and the faculty to maintain with the entire body of students.

The home of Armour institute is a magnificent fire-proof building of the most modern construction, five stories in height (above the basement), and furnished with every convenience that health, comfort, and the requirements of such an enterprise could dictate. The department of kindergartens is provided with commodious quarters in Armour mission, which is close at hand.

The equipment will be of the completest description and will include, besides the scientific apparatus, a fine gymnasium, a technical museum, and a choice library, which already has over ten thousand carefully chosen volumes.

The endowment of the institute and mission reaches one million and a half dollars. Beside this, buildings and equipment are worth one half million.

The whole enterprise is aimed to educate head, hand, and heart. The emphasis will be put upon the school of technology for which the larger part of the income will be used.

Profoundly realizing the importance of self-reliance as a factor in the development of character, the founder has conditioned his benefactions in such a way as to emphasize both their value and the student's self-respect. Armour institute is not a free school; but its charges for instruction are in harmony with the spirit which animates alike the founder, the trustees, and the faculty: namely, the desire to help those who wish to help themselves. Moreover, such liberal provision has been made with regard to free scholarships—which are intended as a recognition of merit and ability—that no deserving young man or woman need forego the privileges of the institute because of straitened circumstances.

State Supt. Crooker's Report.

(For the School Year ending July 25, 1892.)

STATISTICAL REVIEW. School Buildings.

*** The whole number of school buildings reported to the department is 12,017, of which the cities have 615 and the country towns 11,402. The towns have 41 log school-houses, 10,071 frame, 979 brick and 311 stone.

*** During the past year there were expended for buildings, repairs, furniture, sites, etc., for city schools, \$2,669,918.80, and for country schools, including the eleven normals, \$1,255,272.30, making à total of \$3,925,191.10.

*** The aggregate valuation of school property in the cities is

* * The aggregate valuation of school property in the cities is \$32,281,222, while that outside is \$14,783,185, making a total valuation for the state of \$47,064,407. These figures shown an increase in valuation of school property during the last decade of \$16,742,116.

School Population.

School Population.

*** There were reported 1,112,296 persons of school age
—between 5 and 21—for the cities, and 733,223 for the towns,
making a total of 1,845,519 for the state. The number reported as having been registered in the schools for the cities was
538,660, and for the towns 534,433, an aggregate of 1,073,093 for
the state. The per cent. of registration based on the school
population for the cities was about 48, while that for the towns
was nearly 73. These figures show a much better registration
for the country schools than for the cities.

*** The average daily attendance for the cities was 361,767,
which is less than 33 per cent. of their school population, and the
average daily attendance for the towns was 303,087, a little more
than 41 per cent. of their school population, based on school
population, which is a very bad showing.

population, which is a very bad showing.

*** The average length of the school term for the cities was 39.5 weeks of five days each, while that for the towns was 35.5. The present law requires thirty-two weeks of five days each, inclusive of legal holidays occurring during the term. This plan of having the loss of any portion of the five days of any one week work a forfeiture of the rest of the same week, in accounting the time school was actually in session during that counting the time school was actually in session during that week, leads to dishonest practices and embarrassments to the department.

Number of Teachers Employed.

*** During some portion of the year there were employed 5,292 male and 26,869 female teachers, a total of 32,161.

The number employed at the same time and for the legal term of school was, for the cities, 9,515, and for the towns 15,369, making an aggregate number of 24,884, which made the basis of the state quota of public money. Of the 32,161 who were employed for any portion of the year 2,694 were normal school graduates, 869 were licensed by the superintendent of public instruction and 28,598 were licensed by local officers and school commissioners. commissioners.

It is an encouraging and gratifying fact that the number of normal school graduates employed for the year exceeds the num-ber employed last year by 426.

Teachers' Salaries.

* * * The aggregate amount paid for teachers' salaries for the cities was \$7,048,412.82 and for the towns \$4,572,653.91, a total of \$11,621,066.73. This is an increase over last year of \$484. 046.88 for the cities, and \$124,033.42 for the towns, a total of \$603,080.30.

Local Supervision.

* * * In nearly all of the thirty-four cities of the state the super-vision of the schools therein is delegated to city superintendents, and the licensing and employing of the teachers are under the di-rect control of the superintendents and boards of education, gov-erned by corporation laws and regulations in conformity with the

** The schools outside of cities and incorporated villages are under the supervision of 114 school commissioners, who license the teachers under the rules and directions of the superintendent of public instruction in accordance with the regulations governing the system of uniform examinations.

* * * * * During the year there were held 1.070 examinations at

During the year there were held 1,070 examinations at which there were 20,945 candidates examined, of whom 464 re-ceived first grade, 5,530 second grade and 7,354, third grade cer-tificates. Besides the commissioners' certificates there were issued 29 state certificates and 48 college graduates' certificates by the superintendent of public instruction.

* * It must be evident to every thoughtful mind that all of our youth can not obtain a college training or enter the professions, but that all may and ought to receive such an education as will fit them for the duties belonging to good citizenship.

much attention is given to higher education at the expense of a thorough, practical grounding in a knowledge of the subjects with which the great masses have to deal in ordinary business transactions. The duty of the honest and conscientious educator is to remove all false and mistaken goals, to cease from the unprofitable pursuit of multiplied and multiform purposes of no earthly practical value, and to devote time, attention, and no earthly practical value, and to devote time, attention, and energy to the simpler, worthier, and more practical task of elementary education.

Compulsory Education.

* * * Eighteen years have passed since the compulsory education law went into operation in this state. It has utterly failed to accomplish anything except to subject itself to ridicule. Indeed, as a general rule, compulsory school laws in other states as well as New York have not accomplished the results expected of

Normal Schools.

* * * The total valuation of the eleven normal schools of the state including all permanent fixtures, such as buildings, sites, furniture, apparatus, etc., up to the present time, in round numbers is \$1,820,091, of which the state has paid the greater part. It appears that the school at Buffalo has the greatest, \$251,791, and the one at Plattsburg, \$104,782, the least

The whole number of teachers employed during the past year was 167, and the total cost of instruction, exclusive of kindergar-

was 167, and the total cost of instruction, exclusive of kindergarten and primary instruction, was \$146,095, an average salary to each teacher of \$875, which is certainly not extravagant.

To the cost of normal instruction must be added \$23,540 for kindergarten and primary instruction; \$6,902.94 for library and text-books and apparatus; \$8,115.79 for mileage of pupils; \$9,415.53 for salaries of janitors; \$78,748.75 for repairs of buildings and improvement of grounds; and \$50,674.04 for other expenses, including balance on hand, making a sum total of expenditures for the year of \$323,492.05.



The New York State Normal College.

In June, 1894, the State normal college at Albany will celebrate its jubilee, or semi-centennial anniversary, and the initial steps have already been taken towards making the meeting worthy of the occasion. When this, the first institution in the state of New York, for the training of teachers, was established, it was regarded as an "experiment." The success of this experiment has indeed by the foundation of the state of the success of this experiment. it was regarded as an "experiment." The success of this experiment may be judged by the fact that it has maintained a vigorous life and so fully demonstrated the necessity and value of professional training, for those who would teach, that to-day, half a score of similar state institutions are located within our borders.

When, in March. 1890, the regents of the university granted a charter, changing the New York state normal school to the New York state normal college, with power to confer degress in pedagogy, another "experiment" was began, and its success seems already fully assured. Its last commencement roll of graduates contained the names of five ladies and five gentlemen who had

previously been awarded college degrees.

The institution has now a flourishing high school department in which these college graduates demonstrated their "aptness to in which these conege graduates demonstrated their applies to teach" and their ability to do high grade work in secondary schools. The demand for such teachers is now much in excess of the

supply, and most of them have already accepted positions at good

The average college graduate is but poorly prepared to meet the present-day requirements for the successful teacher; but when he has received a year of such professional training, in both the science and the art of teaching, as the State normal college is now giving, he may take his place at once among the skilled laborers in the school-room.

As these facts become more generally known it will surely come

As these facts become more generally known it will surely come to pass that a constantly increasing number of college graduates will feel that they cannot afford to teach without first availing themselves of the means for preparation, so generously provided.

The two-year classical course of solid professional work was also represented by five ladies and five gentlemen—showing that these higher courses are equally attractive to both sexes. The English and kindergarten courses increased the total number graduating to about fifty in all.

It may be noted as an interesting fact that the State normal

college is the only institution in the state, which can give both a pedagogical degree and a license to teach, and also the only institution in the state in which pupil teachers, under supervison and criticism, are instructing classes of a distinctly secondary grade.

The summer normal at Henderson, Texas, has begun its work. Prin. T. R. Day, of the Tompson high school is the conductor. He is a man of marked ability who in the ten years that he is engaged in teaching has earned for himself a solid reputation for thoroughness and progressiveness. Few men of his state have enjoyed such uniform success,

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The Chicago Schools.

Mayor Carter Harrison has made his nominations to the school board. The anti-faddists are greatly disappointed, the progressive friends of the schools jubilant. Messrs. Brennan, D. R. Cameron, Halle, and Keane were renominated. Mr. Lindblom was named in place of the ardent anti-faddist, Mr. Gunderson. Mr. Charles S. Thornton succeeds Mr. Goetz. In place of Mr. McLaren the mayor nominated Mrs. Caroline K. Sherman, a lady of bread culture and council indeprese.

of broad culture and sound judgment.

The city council is opposed to some of the nominations. At their meeting, two weeks ago, the nominations were referred to the committee on schools amid shouts of "No fads!" "No

The Inter-Ocean says:

The Inter-Ocean says:

"The Republican members of the board of aldermen will do well to abstain from factious opposition to the nominations made by the mayor to fill vacancies on the board of education. The persons nominated by the mayor are, with hardly an exception, progressive in theory, and without any exception upright and practical in method.

"One cause, and it is far from the least weighty among many causes that worked together in the last municipal campaign, toward the election of Mr. Harrison over a Republican is to be found in the action relative to school matters of the Republican members of the last board of aldermen. It was a curious spectacle that presented itself when Republican aldermen were seen following the lead of the Post, Tribune, and Herald, in opposition to progressive systems of education. The Inter Ocean has no doubt of the honest intentions of the gentlemen who were misled by the cry of 'fads,' but it doubted their wisdom when they were arraying themselves against progres-

sive measures, and it is certain of their lack of wisdom, now that Mr. Har-

sive measures, and it is certain of their lack of wisdom, now that Mr. Harrison has captured the mayoralty largely by the aid of voters who believed that he would appoint members of the board of education from among the friends of progress.

"What are sneeringly called the 'fads' in the schools are the evidences of progress in the schools. The conception of the purposes of the free public schools has come to be that of equality with the best private schools. What is taught to those children of the rich that range between six and fourteen years of age should be taught to the children of the poor, and of the persons of moderate means. Indeed it is more important that the public schools should be excellent than that any other schools should be perfect, For the children of the rich have time and means to fit themselves for the duties of citizenship after they have passed the fourteenth or fifteenth year. But the children in most families end their school days in their fifteenth, or at the most in their sixteenth year. In the eight years that form the average education of public school life there is time to lead a scholar to the graces as well as into the practicalities of the life. And it is more important that the ethics and the aesthetics shall be taught in the public schools than in the private ones."

Meetings of Educational Associations.

JULY 25-26-27.—South Carolina State Teachers' Association, will meet at Spartansburg. Pres., Dr. S. Lander, Williamston; Sec., Prof. Dick, Union.

Union.

JULY 35-28.—Educational Congress at the World's Fair.

DECEMBER.—The Oregon State Teachers' Association will convene at Portland. Pres., E. B. McElroy, Salem, Oregon

DEC, 27.—The South Dakota State Teachers' Association will convene at Parker, S. D. Pres., C. M. Young, Vermillion, S. D.; Sec., Edwin Dukes, Parker, S. D.

DEC. 26-28.—Montana State Teachers' Association, Butte City.

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Several letters have come from Indiana concerning the difficulty at the Terre Haute normal school. One that seems to know, writes as follows: "President Parsons has been there 17 years, and has given much satisfaction. Prof. Tompkins has been there three years. Last fall the trustees were asked to investigate the charge that Prof. Tompkins was criticising the management, and divided he had been indigesent. June 3 they met and position charge that Prof. I ompoins was criticising the management, and decided he had been indiscreet. June 1, they met and notified him he was not to be re-elected. The students sympathized with him, and cheered him at the morning assembly, and hissed the president; they passed resolutions calling for the trustees' reasons; the trustees then dismissed Prof. T. There is a strong sympathy for him; the students seem to feel he has been unjustly dealt with; he is an able and magnetic teacher. Then there are those who stand for the rule of authority, uphold the trustees on the ground that there cannot be two masters in the trustees on the ground that there cannot be two masters in the school. The unpleasant part is the deprivation of diplomas to quite a number of the graduating class; those who apologized got theirs. There are two parties, each think he is right; but a reaction seems to be setting in, that the school must be sustained by every one.

Summer Schools.

Cook Co. (Ill.) Summer Normal School, Englewood, Ill. July 10, 28, Col. Francis W. Parker, principal.
Martha's Vineyard Summer Institute, July 10, W. A. Mowry, president, Salem, Mass.
Summer Course in Languages. (Berlitz Schools of Languages. Auditorium, Chicago, Ill.) Asbury Park, N. J.
Cornell University Summer School, Ithaca, N. Y., July 6, Aug. 16. The Registrar, Cornell University, Ithaca, N. Y.
Chautauqua Assembly, College of Liberal Arts and other Schools, Chautauqua Assembly, College of Liberal Arts and other Schools, Chautauqua, N. Y. W. A. Duncan, secretary, Syracuse, N. Y.
Summer School, Elocution-Delsarte, July 5. Address H. M. Soper, 26
Van Buren street, Chicago, Ills.
Summer School, Greer Normal College, Hooperton, Ills., June 13. William H. Monroe, president.
The Sauveur College of Languages, Rockford College, Rockford, Ills., July 3. Address Dr. L. Sauveur, 6 Copley street, Roxbury, (Boston), Mass.
The National Summer School at Chicago, Englewood, Ills. Address

July 3. Address Dr. L. Sauveur, 6 Copley street, Roxbury, (Boston), Mass,
The National Summer School at Chicago, Englewood, Ills. Address Chas. F. King, manager, Boston Highlands, Mass.
Summer School for Teachers at Sherburne, N. Y., July 19. Address W.
S. Knowlson, Sherburne, N. Y.
Midsummer School at Whitney's Point, N. Y., July 24, Aug. 11. H. T.
Morrow, manager, Binghamton, N. Y.
Summer Session of six weeks of the National School of Elocution and Oratory, at Grimsby Park, Ont., Can., July 3, Aug. 12. Geo. B. Hynson, principal, 1020 Arch street, Philadelphia, Pa.
Vanderbilt University Summer School for Higher Physical Culture, Nashville, Tenn., June 16, Aug. 16.
Callanan Summer School of M thods Des Moines, Iowa. C. W. Martindale, president, Des Moines, Iowa.
District Summer Normal, Henderson, Texas. T. R. Day, Conductor, Timpson, Texas. From July 10 to August 11. Judge S. J. Hendrick, Henderson, Texas, Manager.

The 26th annual session of the Arkansas State Teachers Association was held at Morrilton, June 28-30, and proved the most successful one ever held in the state. The following officers were elected: President, T. P. Murray, of Morrilton; Corresponding Secretary, H. A. Nickell, of Ozark; Recording Secretary, Miss Mattie Hallum, of Texarkana; Treasurer, R. H. Parkham, Little Rock. County Examiners' Association met at Morrilton, June 29 and 30. The grade for 1st grade license has raised from 85 to 90%. Encouraging reports were made by the examiners as to the educational interest of their respective counties. The officers elected are: President, J. J. Doyne, Lonoke; Secretary, A. Nickell, of Ozark.

The Reading Circle held an interesting meeting June 30 at Morrilton; a three years' course was adopted and recommended, the present year's course was adopted and recommended, the present year's course continued another year with some additional books. Officers elected, President, R. H. Parham. of Little Rock; Secretary, C. S. Barnett, of Eureka Springs. State Organizer Nickell's efficient services as corresponding secretary were handsomely appreciated.

The English have established a public school system only within a few years. It is not a simple system such as we have in this country, but depends chiefly on the use of church schools for the instruction of certain classes of pupils at the public expense. When the church schools do not take in all the children for the chirch public expenses. of a district a distinctly public school is set up. The fame of the American common school system has reached England and a few weeks ago an official commission came from that country to this for the purpose of an examination and report of our schools. A new school bill is to be prepared for the action of parliament, looking toward an extension of the distinctly public school system, and it is the purpose of the commission to dis-cover what features of the common schools of the United States

can be adopted with advantage.

We think it is a good thing that all the commissioners are women and all experienced teachers in the London public schools. They are said to be women of particular capability for the duties with which they are charged. It is a fact that in the English schools especially the women teachers are less bound by tradi-tions and more alert in the discovery of improved methods. What they have seen in the few weeks which they have spent in schools in the Eastern states is said to have made a strong and favorable impression on their minds, and it is believed that their further investigations will result in a report that will effect great changes in the plans for the extension of the English public school work.

The common school system had its birth in this country and here it has reached its highest state. Free and general educa-tion has been the most cherished idea of the people of this country and surely the results are worth the study of nations entering on the work of organizing a free school system. SENTINEL.

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New Books.

Students of physical culture will be interested in a recent publication, Psycho-Physical Culture, by Julia and Annie Thomas. The book is divided as follows: (1) Psycho-Physical Pose; (2) Joint Movements; (3) Repose; (4) Exercises for the Organs of Speech; (5) Breathing-Exercises; (6) Voice-Culture; (7) Address Exercises; (8) Equilibrium; (9) Walking and Running; (10) Harmonious Action; (11) Gesture; (12) Elocution. Psychophysical culture may be defined as those exercises or movements of the body, excited and sustained by soul-force, and directed by, without taxing mental activity. To render exercise as beneficial as possible, it should be of a nature to excite the spirit with pleasurable emotions and to attract the mind as well as to engage the body. The object of psycho-physical culture is to employ all the muscles and joints of the body (unconsciously), and especially to strengthen those which are weak; to give elasticity and perfect psychic control of the body; to develop strength and health; to give graceful bearing, a cultured, polite manner and refinded deportment. The exercises were devised for pupils who came for the study of elocution with stooping shoulders, narrow chests, protruding chins. superfluous flesh, and attendant evils, heavy-footed and heavy-hearted, and who, after practicing exercises in other systems of physical culture, were apparently little benefited. The book has 46 full-page illustrations. (Edgar S. Werner, 108 East 16th street, New York. \$1.50.)

The publishers of the Makers of America series have done well to include a life of Thomas Jefferson, for if there is any one man whose work goes to the roots of our system it is his. Had Jefferson's opponents prevailed we would doubtless have had here a tilted aristocracy and an hereditary king. He believed in and trusted the people, wrote and worked for democracy, and was so potent a factor at the organization of our government that a great political party has always been glad to claim him as its founder. His claim to recognition is emphasized by the fact his ideas are gaining headway all over the world, even in monarchical countries. Most any one of his achievements woulch have made the reputation of an ordinary man. He secured the repeal of the law of primogeniture, he wrote the Declaration of Independence, he established the decimal system of money, he secured the purchase of Louisiana, and performed numerous minor services. No one who would know our government and the influences at work in its formation should leave Jefferson out of the account. This volume by James Schouler, LL.D., is only 252 pages and the narrative had to be very much condensed; the main points have been well covered. The book should be read by all students of American political history. (Dodd, Mead & Co., New York. \$1.00.)

Supt. Edgar E. Ferguson, of Sand Beach, Mich., has made a collection of *Opening Exercises for Public Schools*, which are published in a little volume of 68 pages. The selections are gathered together under such subjects as the Sabbath, idleness and industry, wisdom, intemperance, etc. The Bible is largely drawn upon. The teacher will find it a very useful help. (Brown Brothers, printers, Sand Beach, Mich.)

A small volume of poems from Prederick Peterson, M. D., a well known writer for the magazines, has lately appeared that takes its title from the first poem, In the Shade of Ygdrasil. Some of these verses were published in 1883 in a volume of poems and Swedish translations and the others have appeared since in Lippincott's Magazine, the Cosmopolitan, the London Academy, and other periodicals. They are marked by their delicate, refined sentiment and careful finish. Some of the most enjoyable of these poems are the delicate bits of description of Eastern lands. (G. P. Putnam's Sons, New York and London.)

As No. 25 of the Unity library is published Mortal Man, a dedactic poem in rhymed ten-syllable couplets, written by A. Easton. It treats of man's mental and moral constitution and his relations to nature and God. There are many fine thoughts in it well be expressed. The series to which this little book belongs is published monthly at \$5 a year by Charles H. Kerr, 175 Monroe street, Chicago.)

Principal Conklin, of grammar school No. 3, Brooklyn, N. Y., has prepared a book, entitled Practical Lessous in Language, that furnishes a great deal of useful work for the school-room. The lessons are intended to cover the last two years of the primary course and are graded to suit the capacity of pupils as they advance. They are under two heads "Things to Notice" and "Things to Do." Under the former are development questions, and the deductions drawn from the answers to such questions and under the latter are varied exercises of such a nature as to interest the pupil. There are picture stories, stories for reproduction, verses to be memorized, skeleton sentences to be filled in, etc. In a practical, way are set forth the fundamental principles of punctuation and the construction of sentences, and many points in grammar in which both young and old people commonly fail are impressed on the pupil. It is a well arranged and thoroughly practical little book. (American Book Co., New York, Cincinnati, and Chicago. 35 cents.)

Recent additions Heath's Modern Language series are L'Histoire de la Mere Michel et de Son Chat, by Emil de la Bedolliere, edited, with notes, vocabulary, and appendixes, by W. H. Wrench, B. A., and Le Petit Tailleur Bouton, by M. Geuin, edited, with notes, vocabulary, and appendexes, by W. S. Lyon, M. A. (D. C. Heath & Co., Boston. 25 cents each.)

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